PHYSICAL REVIEW B **80**, 229903(E) (2009)

Erratum: Cold versus hot shear banding in bulk metallic glass [Phys. Rev. B 80, 134115 (2009)]

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(Received 19 November 2009; published 16 December 2009)

DOI: 10.1103/PhysRevB.80.229903 PACS number(s): 61.43.Dq, 62.20.F−, 99.10.Cd

In Eq. (6) of our paper, the "×" sign was mistakenly added in production when the equation was reformatted into two lines. $x'(t-\tau)$ refers to the vertical speed of the sliding shear band as a function of time, not the product of x' and $(t-\tau)$. To clarify, Eq. (6) should read:

$$\left\{\left[\sigma_y - \frac{Ex(t)}{L(1+S)}\right] - \left[\sigma_f - \frac{AE^2\varepsilon_y \sin\theta}{2\rho c_p T_g\sqrt{\pi\alpha}}\int_0^t x'(t-\tau)\frac{d\tau}{\sqrt{\tau}}\right]\right\}\frac{\pi d^2}{4} = Mx''(t) \tag{6}$$

where $x(t)$ is the vertical displacement as a function of time t, $x'(t-\tau)$ is the vertical speed at the time $t-\tau$, and $x''(t)$ is the vertical acceleration as a function of t. σ_y is the yield stress and σ_f is the flow stress; both are fixed values at room temperature (T_R). The elastic unloading corresponds to the term following σ_y. The drop of flow stress due to temperature rise corresponds to the term following σ_f, such that

$$\sigma_f(T) = \sigma_f[T_R + \Delta T(t)] = \sigma_f - \frac{AE^2\varepsilon_y \sin\theta}{2\rho c_p T_g\sqrt{\pi\alpha}}\int_0^t x'(t-\tau)\frac{d\tau}{\sqrt{\tau}}$$

Eq. (6) is an integro-differential equation of the unknown function $x(t)$, with boundary conditions $x(0)=0$ and $x'(0)=0$. It is solved numerically to obtain $x(t)$, $x'(t)$, $x''(t)$, as well as the temperature rise $\Delta T(t)$.

